

Cosmic Frontier Experiment Status

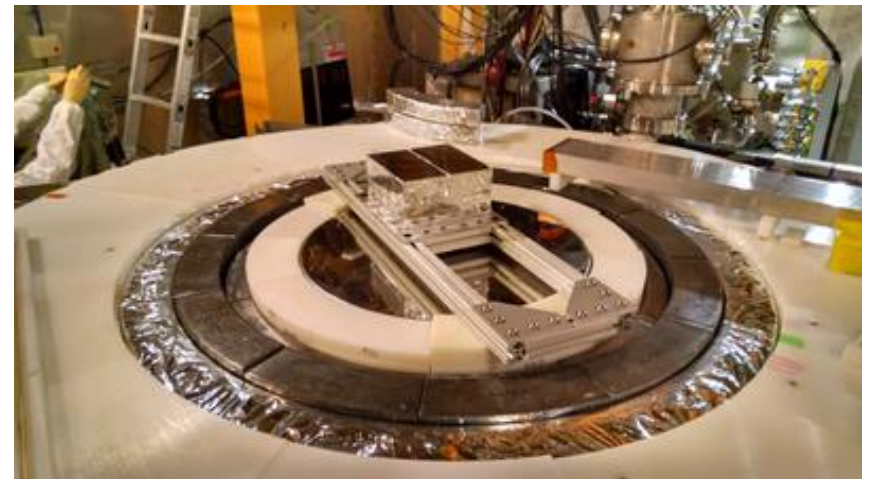
July 6, 2015

Experiment	Location	Status	Start of operations	Nominal end of operations	Physics
SuperCDMS	Soudan	Operating	Mar 2012	Sep 2015	Dark Matter
COUPP/PICO 2L	SNOLAB	Operating	Dec 2013	Sep 2017	Dark Matter
COUPP/PICO 60	SNOLAB	Refurbishing	June 2013	Sep 2017	Dark Matter
Darkside 50	LNGS (Gran Sasso)	Operating	Jan 2014	Sep 2017	Dark Matter
DAMIC	SNOLAB	Operating	Dec 2012	Sep 2016	Dark Matter
Dark Energy Survey	CTIO, Chile	Operating	Sep 2013	Feb 2018	Dark Energy
Holometer	Meson Lab	Operating	Sep 2014	Sep 2016	Spacetime



SuperCDMS Soudan

- Removed top of shield in early June for photoneutron calibration
 - Monoenergetic neutrons for nuclear recoil energy calibration
- 260 hours of SbBe acquired so far (+114 hours of Sb)
- Switch to YBe next week



Holometer Operations Status

7/6/2015



- Overflow of “Waldman Pond” flooded the MP9 tunnel (again). Wet-vac’ed around 80 gallons of stormwater out of tunnel. New sump pump and sand bag levee installed.
- Still preparing supplemental calibration and monitoring apparatus for planned July data run.

- PICO-2L taking good physics data!
- PICO-60 being refurbished with replacement jar after crack found in early May
 - Believe crack caused by misaligned flange



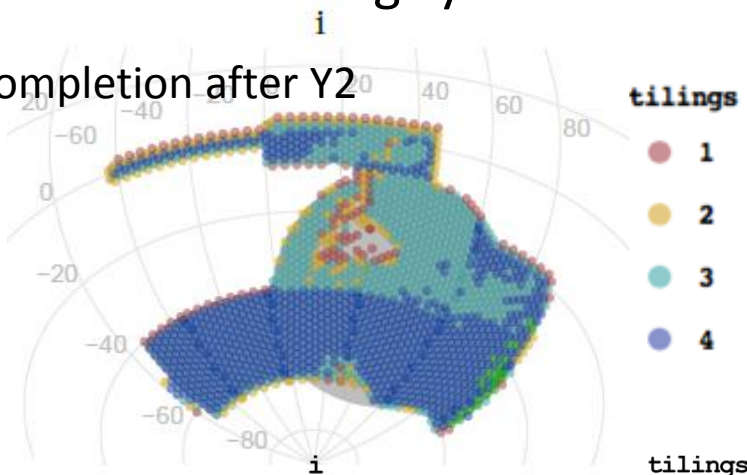


DARK ENERGY
SURVEY

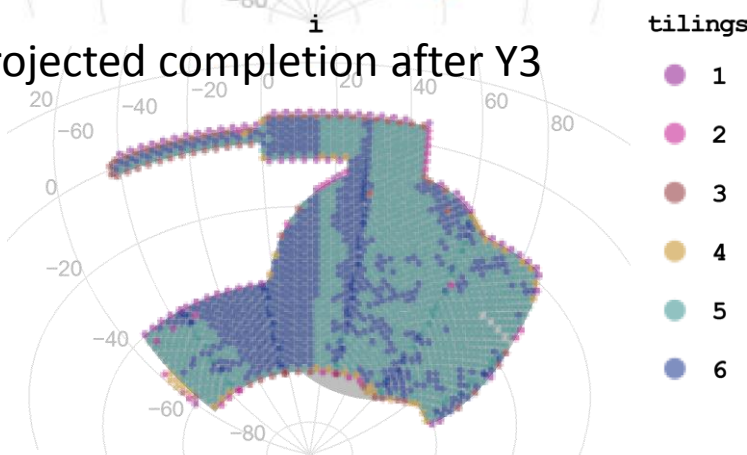
DES Summary

- Setting up observing schedule for Year 3 (starts early August)
- Engineering run scheduled to maintain cooling system

Completion after Y2

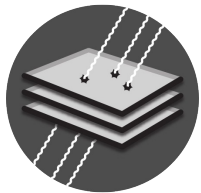


Projected completion after Y3



- 11 papers submitted for 16 talks at April APS meeting
- ~10 more planned for this month

DES Publication	Corresponding Author(s)	CWR End Date	Assigned PB Reader	CWR Comments	Status	arXiv/Telecon
DES 2015-0071	C. Chang	May 6, 2015	R. Miquel	DES-2015-0071_Comments	Accepted	1505.01871
DES 2015-0066	C. Chang	Apr 10, 2015	R. Miquel	DES-2015-0066_Comments	Accepted	1504.03002
DES 2015-0065	K. Kuehn	Apr 10, 2015	H. Lin	DES-2015-0065_Comments	Submitted	1504.02996
DES 2015-0064	J. Simon	Apr 10, 2015	K. Honscheid	DES-2015-0064_Comments	Submitted	1504.02889
DES 2015-0057	A. Saro	Apr 15, 2015	A. Roodman	DES-2015-0057_Comments	responding to CWR	
DES 2015-0051	A. Drlica-Wagner	Mar 7, 2015	K. Honscheid	DES-2015-0051_Comments	Resubmitted	1503.02632
DES 2015-0047	C. Lidman	Apr 8, 2015	R. Kessler	DES-2015-0047_Comments	Submitted	1504.03039
DES 2015-0044	D. Goldstein	Apr 3, 2015	T. Diehl	DES-2015-0044_Comments	Submitted	1504.02936
DES 2015-0043	K. Bechtol	Mar 6, 2015	A. Walker	DES-2015-0043_Comments	Accepted	1503.02584
DES 2015-0042	T. Diehl	Mar 10, 2015	DES	DES-2015-0042_Comments	Submitted	1504.02900
DES 2015-0040	Y. Zhang	Apr 8, 2015	T. Jeltema	DES-2015-0040_Comments	Submitted	1504.02983
DES 2015-0039	D. Gruen	Jan 10, 2015	T. Diehl	DES-2015-0039_Comments	Accepted	1501.02802
DES 2014-0038	C. Bruderer	Feb 28, 2015	D. Bacon	DES-2014-0038_Comments	Submitted	1504.02778
DES 2014-0037	A. King	Mar 25, 2015	L. daCosta	DES-2014-0037_Comments	Submitted	1504.03031
DES 2014-0032	D. Hatt	Feb 25, 2015	A. Amara	DES-2014-0032_Comments	Submitted	
DES 2014-0031	E. Sanchez	Oct 10, 2014	R. Kessler	DES-2014-0031_Comments	Submitted	
DES 2014-0029	C. Chang	Oct. 20, 2014	T. Jeltema	DES-2014-0029_Comments	Published	1411.0032
DES 2014-0024	C. D'Andrea	Aug 5, 2014	H. Lin	DES-2014-0024_Comments	Published	1501.07232
DES 2014-0021	S. Reed	Feb 12, 2015	A. Roodman	DES-2014-0021_Comments	Submitted	1504.03264

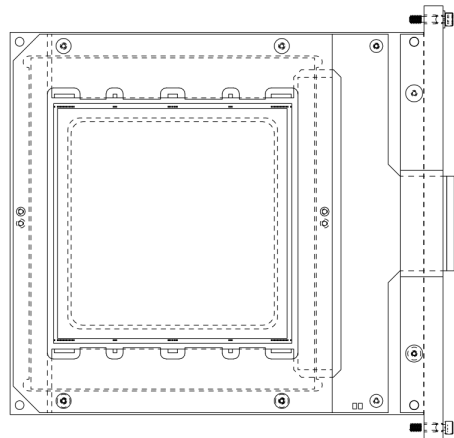


DAMIC - Dark Matter In CCDs

FNAL, UChicago, UMich, Mexico, Argentina, Paraguay, Zurich

June 2015 - July 2015

- Towards DAMIC100:
 - Started the packaging of a full size detector, $4k \times 4k = 16$ Mpix. Current prototypes are 4×2 .
 - Planning next upgrade. Preliminary date August 5.



- DAMIC@Snolab
 - Took 3 weeks of low gain (larger dynamic range) data to measure and identify possible sources of background.
 - Resumed Science-data taking. Using high gain to minimize the noise.

Status: taking data with prototype detectors. Uptime >95%. High quality data.

DarkSide-50 Status



- **Running with underground Ar**

- Uptime in June: 84% (25.3 days)
- DM search livetime in June: 82% (24.9 days)
- 4 days shut down of TPC PMTs due to high rate in one of them.

